

Appl. No. 10/650,401
Amdt. dated August 22, 2006
Reply to Office Action of 5/22/06

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PATENT
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REMARKS

Claims 1-33 are pending in the present application. Claims 1-33 have been examined and are rejected. In the above amendments, claims 1, 7, 10-12, 18, 20, 23, 30 and 31 have been amended, and new claims 34 and 35 have been added. Therefore, after entry of the above amendments, claims 1-35 will be pending in this application. Applicant believes that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

Rejection of Claims 1, 2, 7, 10-15, 18-22, 32 and 33 Under 35 U.S.C. §103(a)

Claims 1, 2, 7, 10-15, 18-22, 32 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* (U.S. Patent No. 5,854,785) in view of Lee *et al* (U.S. Serial No. 2003/0174677A1).

Willey describes a method of moving a wireless device into soft handoff quicker at the start of a call. A mobile station monitors a paging channel from a single base station while in the Idle state. (See column 1, lines 65-66). The mobile station originates a call by sending an Origination Message on an access channel to this base station. The base station then sends a Channel Assignment Message on a paging channel to the mobile station. From this point onward, the base station can transmit on a forward traffic channel to the mobile station, and the mobile station can transmit on a reverse traffic channel to the base station. To add one or more additional base stations for soft handoff, the mobile station can send pilot measurements on the reverse traffic channel to the base station. The base station can then send a new active set on the forward traffic channel to the mobile station. This active set contains all base stations designated to communicate with the mobile station, including any newly added base stations. (See column 2, lines 36-56.) To get the mobile station into soft handoff quicker, Willey describes a proposal to send the pilot measurements on the access channel, instead of waiting until the traffic channels have been established. (See column 2, lines 61-66.) Willey proposes continuing to make pilot measurements while sending access probes on the access channel so that current pilot measurements are sent in each access probe. (See column 5, lines 43-47.)

Lee describes a method for performing handoff by a mobile station from a base station A that does not support new common channels to a base station B that supports the new common channels. A Broadcast Control Channel (BCCH) is one of the new common

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channels. The mobile station receives an Extended CDMA Channel List message (ECCLM) and an Extended System Parameter message (ESPM) of the paging channel from base station B. The ESPM includes a BCCH_SUPPORTED field that indicates whether the BCCH is supported or not supported by base station B. (See paragraph 0045.) The ECCLM includes a BCCH_INCL field that indicates whether reference information of the BCCH is included in the ECCLM. The reference information includes BCCH frequencies, a data rate, a code rate and Walsh information required to decode the BCCH. (See paragraph 0046.) If the reference information is included in the ECCLM, then the mobile station extracts this reference information and uses it to monitor the BCCH. (See paragraphs 0047 to 0049.)

Claim 1 of the present invention recites:

"A device in a wireless communication system, comprising:
a reselection unit operative to provide an indication to perform cell reselection from a first base station to a second base station;
a control unit operative to initiate a cell reselection procedure for the second base station in response to the indication from the reselection unit, wherein the first base station is a current serving cell and the cell reselection procedure selects the second base station as a new serving cell; and
a monitoring unit operative to receive from the second base station sufficient system information to process a paging channel for the second base station, to start monitoring the paging channel upon reception of the sufficient system information from the second base station and prior to completion of the cell reselection procedure, and to monitor the paging channel during time intervals determined based on the sufficient system information to detect for paging messages sent by the second base station to the device."

Applicant submits that claim 1 is patentable over Willey in view of Lee for at least the following reasons.

First, neither Willey nor Lee discloses "receive from the second base station sufficient system information to process a paging channel for the second base station," as recited in claim 1. The rejection indicates that Willey fails to disclose this feature of claim 1. The rejection states that Lee discloses this feature in paragraphs 0043 to 0048. Applicant submits that Lee does not disclose this feature. Rather, Lee discloses receiving reference information from a paging channel and using this reference information to receive a Broadcast Control

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Channel (BCCH). The reference information of Lee is thus not "the sufficient system information to process a paging channel" recited in claim 1.

Second, neither Willey nor Lee discloses "start monitoring the paging channel upon reception of the sufficient system information from the second base station," as recited in claim 1. Neither Willey nor Lee receives "sufficient system information". Hence, neither Willey nor Lee starts monitoring the paging channel upon receiving the sufficient system information.

Third, neither Willey nor Lee discloses "monitor the paging channel during time intervals determined based on the sufficient system information to detect for paging messages sent by the second base station to the device," as recited in claim 1. This feature is supported by paragraph 1037 of the present Application, which states "System Information Type 3 message ("SI3") carries information needed by a terminal to perform cell reselection and receive paging messages from a cell (e.g., to determine the paging blocks for the terminal, as assigned by the cell)."

For at least the above reasons, Applicant submits that claim 1 is patentable over Willey in view of Lee. Claims 2, 32 and 33 are dependent on claim 1 and are patentable over Willey in view of Lee for at least the reasons noted for base claim 1. Independent claims 7, 10 and 11 have each been amended to recite the features noted above for claim 1. These claims are also patentable over Willey in view of Lee for at least the reasons noted for claim 1.

Applicant submits that claim 12 is patentable over Willey in view of Lee for at least the following reasons.

First, neither Willey nor Lee discloses "direct reception of designated system information from a control channel for the second base station," as recited in claim 12. Rather, Lee discloses receiving reference information from a paging channel.

Second, neither Willey nor Lee discloses "if the designated system information from the second base station is received successfully, switch to the second base station and initiate a cell reselection procedure for the second base station," as recited in claim 12. Willey assumes that the mobile station can successfully receive a neighbor base station if the pilot signal strength for this base station is sufficiently strong. Willey does not attempt to receive the designated system information from the second base station first to make sure that the

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second base station can indeed be received successfully. Lee also does not disclose this feature of claim 12.

Third, neither Willey nor Lee discloses "skip the cell reselection procedure if the designated system information is not received successfully," as recited in claim 12. Neither Willey nor Lee discloses skipping handoff.

For at least the above reasons, Applicant submits that claim 12 is patentable over Willey in view of Lee. Claims 13-15 are dependent on claim 12 and are patentable over Willey in view of Lee for at least the reasons noted for base claim 12. Independent claims 18 and 20 have each been amended to recite the features noted above for claim 12. Claim 19 is dependent on claim 18, and claims 21 and 22 are dependent on claim 20. Claims 18-22 are patentable over Willey in view of Lee for at least the reasons noted for claim 12.

Accordingly, the §103(a) rejection of claims 1, 2, 7, 10-15, 18-22, 32 and 33 should be withdrawn.

Rejection of Claims 23, 24, 26, 30 and 31 Under 35 U.S.C. §103(a)

Claims 23, 24, 26, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and further in view of Weaver, Jr *et al* (U.S. Patent No. 5,828,661). For independent claims 23 and 30, the rejection indicates that the combination of Willey and Lee discloses all of the features of these claims except for "ceasing to monitor the paging channel upon a termination event." The rejection indicates that Weaver discloses "a system where a soft handoff ends when communication with the first base station is terminated."

Applicant submits that claim 23 is patentable over Willey in view of Lee and further in view of Weaver for at least the following reasons.

First, the combination of Willey and Lee does not disclose "receive from the second base station sufficient system information to process a second paging channel for the second base station," as recited in claim 23. Rather, Lee describes receiving reference information needed to receive a Broadcast Control Channel (BCCH).

Second, the combination of Willey and Lee does not disclose "to monitor the second paging channel ... during time intervals determined based on the sufficient system information," as recited in claim 23.

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Third, Weaver does not disclose "monitor a first paging channel for the first base station until a terminating event occurs at a time instant after the cell reselection procedure is initiated," as recited in claim 23. Weaver describes soft handoff for active communication and receiving transmissions from multiple base stations to improve reliability. Claim 23 describes monitoring the paging channel for the current serving cell until a terminating event occurs after initiating the cell reselection procedure. Weaver does not describe this feature of claim 23.

For at least the above reasons, Applicant submits that claim 23 is patentable over Willey in view of Weaver. Claims 24 and 26 are dependent on claim 23 and are patentable for at least the reasons noted for base claim 23.

Independent claims 30 and 31 have each been amended to recite the features noted above for claim 23. These dependent claims are thus patentable over Willey in view of Lee and further in view of Weaver for at least the reasons noted for claim 23.

Accordingly, the §103(a) rejection of claims 23, 24, 26, 30 and 31 should be withdrawn.

Rejection of Claims 3, 4, 8 and 9 Under 35 U.S.C. §103(a)

Claims 3, 4, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and further in view of Hafiz (U.S. Patent No. 6,505,042). Claims 3 and 4 are dependent on claim 1, and claims 8 and 9 are dependent on claim 7. The rejection indicates that the combination of Willey and Lee discloses all of the features of base claims 1 and 7, and that Hafiz discloses the additional features of dependent claims 3, 4, 8 and 9.

Applicant submits that the combination of Willey and Lee does not disclose all of the features of base claims 1 and 7, as noted above. Hence, the combination of Willey and Lee is an insufficient basis for the §103(a) rejection of dependent claims 3, 4, 8 and 9.

Accordingly, the §103(a) rejection of claims 3, 4, 8 and 9 should be withdrawn.

Rejection of Claims 5, 6 16 and 17 Under 35 U.S.C. §103(a)

Claims 5 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and further in view of Persson (U.S. Patent No. 5,557,704).

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Claims 6 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee and Persson and further in view of Alvesalo (U.S. Patent No. 5,384,824).

Claim 6 is dependent on claim 5, which is dependent on claim 1. Claim 17 is dependent on claim 16, which is dependent on claim 12.

The rejection indicates that the combination of Willey and Lee discloses all of the features of base claims 1 and 12, and that Persson discloses the additional features of dependent claims 5 and 16. The rejection further indicates that Alvesalo discloses the additional features of claims 6 and 17.

Applicant submits that the combination of Willey and Lee does not disclose all of the features of base claims 1 and 12, as noted above. Hence, the combination of Willey and Lee is an insufficient basis for the §103(a) rejection of dependent claims 5, 6, 16 and 17.

Accordingly, the §103(a) rejection of claims 5, 6, 16 and 17 should be withdrawn.

Rejection of Claims 25 and 27-29 Under 35 U.S.C. §103(a)

Claims 25 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willey *et al* in view of Lee and Weaver, Jr *et al* and further in view of Anderson *et al* (U.S. Patent No. 6,161,013).

Claim 28 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee and Weaver and further in view of Persson (U.S. Patent No. 5,557,704).

Claim 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Willey in view of Lee, Weaver and Persson and further in view of Alvesalo (U.S. Patent No. 5,384,824).

Claims 25 and 28 are dependent on claim 23. Claim 27 is dependent on claim 26, which is dependent on claim 23. Claim 29 is dependent on claim 28.

The rejection indicates that the combination of Willey, Lee and Weaver discloses all of the features of base claim 23. The rejection further indicates that Anderson discloses the additional features of dependent claims 25 and 27, Persson discloses the additional features of dependent claim 28, and Alvesalo discloses the additional features of dependent claim 29.

Applicant submits that the combination of Willey, Lee and Weaver does not disclose all of the features of base claim 23, as noted above. Hence, the combination of Willey, Lee

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and Weaver is an insufficient basis for the §103(a) rejection of dependent claims 25 and 27-29.

Accordingly, the §103(a) rejection of claims 25 and 27-29 should be withdrawn.

New Claims

New claims 34 and 35 recite additional features of the invention. Claims 34 and 35 are dependent on claim 1 and are patentable over Willey in view of Lee for at least the reasons noted for base claim 1.

CONCLUSION

In light of the amendments contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,



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By: _____

Howard H. Seo, Reg. No. 43,106
Phone No. 858-845-5235

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502